Reply to Office Action of April 13, 2011

Amendments to the Claims: This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims

- (Previously Presented) A method of manufacturing a catalysed ceramic wall-flow filter comprising a plurality of channels, which method comprising the steps of:
 - reducing the pressure in a pore structure of the channel walls relative to the surrounding atmospheric pressure to provide evacuated channel walls, and
 - (b) contacting a surface of the evacuated channel walls with a liquid containing at least one catalyst component or a precursor thereof, wherein the liquid permeates the pore structure of the evacuated channel walls,

wherein reducing the pressure in the pore structure of the wall-flow filter occurs prior to contacting the surface of the evacuated channel walls with the liquid; and the plurality of channels in the wall-flow filter are plugged at an inlet end or an outlet end of the wall-flow filter.

- (Previously Presented) A method according to claim 25, wherein steps (b) and (c) are repeated at least once prior to step (d).
- (Previously Presented) A method according to claim 1, wherein the pressure reduction in the pore structure of the channel walls is maintained during the liquid contacting step.
- (Previously Presented) A method according to claim 1, wherein the liquid contains the precursor and comprises an aqueous solution of at least one metal salt.
- (Previously Presented) A method according to claim 1, wherein the liquid containing at least one catalyst component comprises a slurry of at least one particulate metal oxide material in a carrier medium.
- (Previously Presented) A method according to claim 5, wherein the at least one particulate metal oxide material has a D50 in the range 1-20 µm.

Appin. No.: 10/591,632 Amendment Dated

Reply to Office Action of April 13, 2011

- (Previously Presented) A method according to claim 1, wherein the liquid containing the at least one catalyst component comprises a sol of at least one metal oxide material in a carrier medium.
- (Previously Presented) A method according to claim 7, wherein the sol particles have a D50 in the range 10-500 nm.
- 9. (Cancelled)
- (Previously Presented) A method according to claim 1, wherein the at least one catalyst component is loaded in the catalysed ceramic wall-flow filter in an amount from 20-120 g/litre.

11. - 14. (Cancelled)

- 15. (Previously Presented) A method according to claim 1, wherein the ceramic filter is made from a material selected from the group consisting of silicon, silicon carbide, aluminium nitride, silicon nitride, aluminium titanate, alumina, cordierite, mullite pollucite and a thermet.
- (Previously Presented) A method according to claim 1, wherein the filter has a porosity of 40-60%, prior to use.
- 17. (Cancelled)
- 18. (Currently Amended) Apparatus-for-use in manufacturing-A system comprising a catalysed ceramic wall-flow filter having filter walls, wherein said filter walls define a plurality of channels and have a pore structure, the plurality of channels in the wall-flow filter are plugged at an inlet end or an outlet end of the wall-flow filter, said-and an apparatus for dispersing at least one catalyst component in the channels of the filter walls comprising means for sealingly isolating the plurality of channels of the ceramic wall-flow filter from the surrounding atmosphere, means for reducing pressure in the isolated channels to below the surrounding atmospheric pressure thereby to establish a vacuum in the pore structure of the filter walls to provide isolated and evacuated channels, at least one reservoir for holding a liquid containing the at least one catalyst

Appln. No.: 10/591,632 Amendment Dated

Reply to Office Action of April 13, 2011

component or a precursor thereof and means for dosing the isolated and evacuated channels with a pre-determined quantity of the liquid.

- 19. (Cancelled)
- 20. (Cancelled)
- (Currently Amended) An apparatus A system according to claim 18 wherein the
 apparatus is at least semi-automated to control both the means for reducing pressure in
 the isolated channels and the means for dosing the liquid.
- (Previously Presented) A method according to claim 5, wherein the carrier medium comprises water.
- (Previously Presented) A method according to claim 7, wherein the carrier medium comprises water.
- 24. (Previously Presented) A method according to claim 15, wherein the material from which the ceramic filter is made is the thermet, wherein the thermet is selected from the group consisting of Al₂O₃/Fe, Al₂O₃/Ni and B₄C/Fe.
- 25. (Previously Presented) A method according to claim 1 further comprising:
 - (c) drying the filter containing the catalyst component or its precursor, and
 - (d) calcining the filter containing the catalyst component or its precursor.
- 26. (Currently Amended) An apparatus-for use in manufacturing A system comprising a catalysed ceramic wall-flow filter having filter walls, wherein said filter walls define a plurality of channels and have a pore structure, the plurality of channels in the wall-flow filter are plugged at an inlet end or an outlet end of the wall-flow filter, said-and an apparatus for dispersing at least one catalyst component in the channels of the filter walls_comprising a pressurisable container having a sealable closure for receiving the ceramic wall-flow filter, a vacuum pump to reduce pressure in the isolated channels to below the surrounding atmospheric pressure thereby to establish a vacuum in the pore

Appln. No.: 10/591,632 Amendment Dated

Reply to Office Action of April 13, 2011

structure of the filter walls to provide isolated and evacuated channels, at least one reservoir for holding a liquid containing the at least one catalyst component or a precursor thereof, and a pump for dosing the isolated and evacuated channels with a pre-determined quantity of the liquid.

(Currently Amended) An apparatus A system according to claim 26, wherein the vacuum
pump maintains the reduced pressure in the isolated channels to below the surrounding
atmospheric pressure during dosing of the liquid.